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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,257	09/10/2003	Joachim Thiel	242680US6	4014

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EXAMINER

MANOHARAN, VIRGINIA

ART UNIT PAPER NUMBER

1764

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/658,257

Applicant(s)

THIEL ET AL.

Examiner

Virginia Manoharan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 August 2006.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1,8-9,13 and 15 is/are rejected.  
7) ☒ Claim(s) 2-7,10-12,14 is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

Claim 15 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15, as framed, is functional to the point of being indefinite inasmuch as the process steps language and the functional language makes the actual structure vague and the true structural limitation for apparatus claims, are difficult to determine. Just as an examples are the recitations of the followings: "is completed at the top by the at least one chimney tray" ; "is continued into the spray condenser" ; and the "wherein clause . The chimney tray, spray condenser and spray zones, e.g., should be positively recited as structures.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 15 is rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over anyone of Machhammer et al (6,423,875), Thiel et al (6,679,939) or Nestler et al (6,727,383).

Anyone of the above references is deemed to anticipates or renders obvious the claimed apparatus which is comprised in combination of at least one chimney tray; a spray condenser; and a region which contains separating internals..” as broadly claimed in claim 15. See e.g., col. 15, lines 39-55 of Thiel et al; col. 4, lines 36-45, and col. 5, lines 20-55 of Nestler et al; and col. 12 lines 15-33 of Machhammer. The “wherein” clause in claim 15 does not define any structural element of an apparatus, and accordingly cannot be distinguished from the prior art in the structural sense. [It is noteworthy that a “means plus function” defining a structure/apparatus is authorized by 35 USC, 6<sup>th</sup> paragraph].

Claims 1, 8-9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matsumoto et al (6,409,886) or Matsumoto et al (6,372,944) in view of anyone of Machhammer et al (6,423,875), Thiel et al (6,679,939) or Nestler et al (6,727,383). Either the above Matsumotos’ references discloses the method/process as claimed. See entire disclosure of each reference. The process/method of either the Matsumotos references differs from the claimed invention in that claim 1, for example, recites “effecting the direct cooling of the vapor in the condensation space in at least two spray zones, which are spatially successive and are flown through by vapor, by spraying in each of the at least two spray zones supercooled top condensate including added polymerization inhibitor through spray nozzles; and lowering a temperature of the

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sprayed supercooled top condensate from spray zone to spray zone in the flow direction of the vapor..." However anyone of the above secondary references is deemed to render obvious the above method of effecting direct cooling of the vapor... by spraying a condensate comprising added polymerization inhibitor. See e.g., col. 15, lines 39-55 of Thiel et al; col. 4, lines 36-45, and col. 5, lines 20-55 of Nestler et al; and col. 12 lines 15-33 of Machhammer. To combine the above references would have been obvious to one of ordinary skill in the art inasmuch as all the references are directed to similar processing environment, i.e., to a process for inhibiting polymerization of easily -polymerizable compound; and for the advantages disclose at col. 2, lines 23-30 of the Thiel's reference.

Claims 2-7, 10-12 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Virginia Manoharan whose telephone number is 571-272-1450.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola, can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
VIRGINIA MANOHARAN  
PRIMARY EXAMINER  
ART UNIT 128 1764